Land Use Data Base System Upgrade for Improved Access **FY2003 Request: $390,000**
Reference No: 33909

AP/AL: Appropriation
Category: Development
Location: Statewide
Election District: Statewide
Estimated Project Dates: 07/01/2002 - 06/30/2004

Project Type: Information Systems

Contact: Rich McMahon
Contact Phone: (907)269-8836

Brief Summary and Statement of Need:
DNR's computer system is in need of change. It relies on 20+-year-old technology. It cannot provide the services that DNR staff and customers now require. The system requires cumbersome data entry procedures, and it provides reports that are not adequate for the public or DNR staff to manage its programs. In general, the system does not provide adequate service for today's needs.

The consequence of these problems is that DNR cannot service the public as efficiently as it should. Individual transactions (leases, permits, etc.) take longer, use too much staff time, and the public cannot get information from DNR without interpretation by staff.

Funding:

	FY2003	FY2004	FY2005	FY2006	FY2007	FY2008	Total
Gen Fund	$390,000	$440,000					$830,000
Total:	$390,000	$440,000	$0	$0	$0	$0	$830,000

☐ State Match Required ☐ One-Time Project ☒ Phased Project ☐ On-Going Project
0% = Minimum State Match % Required ☐ Amendment ☐ Mental Health Bill

Operating & Maintenance Costs:

	Amount	Staff
Total Operating Impact:	0	0
One-Time Startup Costs:	0	
Additional Estimated Annual O&M:	0	0

Prior Funding History / Additional Information:
SLA01/CH61 - $495,000 for project initiation.

Detailed Project Justification:
DNR's computer systems need change. The problems with the current 20-year-old system are summarized below:

- ***Data entry is too slow.*** Data entry procedures are cumbersome and difficult to learn. In addition, staff spends time typing information into the computer that applicants would be very willing to provide electronically.
- ***Reporting is inadequate***. It is difficult to get flexible management reports from the system. Often, answering a question requires specific programming. Staff cannot manage programs using the legislative-mandated measures and other measures established by the department without duplicating the computer information on individual PCs.
- ***The program does not perform services it should***. Staff manually perform many tasks that a modern system would automate. Staff and the public spend a lot of time finding information that should be available through the system.
- ***The program is complicated for the public and takes a long time for staff to learn.*** The system uses archaic codes that are not understandable to the public.

Overall, the goals of the project are to provide a modern system that allows DNR to take advantage of off-the-shelf software to provide better information to DNR staff and the public, and to automate tasks that are currently performed by hand. The project is expected to raise the productivity of DNR staff to accomplish higher per unit volumes of work by simplifying the manner in which information is entered, managed, and retrieved.

Project Deliverables
This request for $390,000, when combined with the $495,000 appropriated in SLA2001, funds a variety of project deliverables that improve access to the Land Use Data Base System (LAS), which is the central business transaction processing system for DNR.

The goal in FY02 is to demonstrate new system capabilities for a few of DNR programs. In this way, the Department can solve the problems with the old system on a manageable subset of DNR's programs. By the end of FY02, the Department will have new working systems for some of its programs, and will evaluate the solutions to improve them and extend them to new systems in other DNR programs in FY03 and FY04. The main tasks for the FY02 funding are below:

Task 1: Build a New Water System – This will simplify filing of water rights and reduce the work required to adjudicate each filing. The goal is reduced adjudication time and improved customer service. Specifically, we expect the system to allow the public to apply for permits on-line (thereby eliminating the need for staff to re-type the information; gather information for adjudication; accelerate public notice and other procedural tasks; and provide management reporting to meet the performance measures and fee information outlined for the Department in discussion the water bill, HB 185, passed by the legislature in 2000.

Task 2: Provide Flexible Reporting for Management and Staff. DNR will use a combination of commercial and custom software to provide flexible management reports to staff and management. The reports will allow individual program managers to gain the information to manage their programs consistent with the legislatively mandated performance measures and others provided internally by management. This is a very important tool for managers and staff. Public access to DNR information will be expanded using the Internet. This allows the public to access information directly, with less help from DNR staff.

Task 3: Build the Land Sale Web Site – This will allow web input of sealed bids for Land Auctions. Software will allow expedited review of bids when the auction closes. After the auction is complete, the software will allow ongoing sales of unselected parcels as over-the-counter sales on the web. This application is a prototype using ORACLE software for DNR applications in the enterprise-computing environment.

Task 4: Build Land Use Permit Application – This task will offer the department and the public a new approach for all aspects of the land use permitting process. The goal is to streamline the application process in all phases, reducing the overall cost of permit review, issuance, and monitoring. This project will make the process easier for the public to understand permit requirements and permit status during the review.

Task 5: Accept First Year Mining Rental in the Recorder's Office - Update the Recorder's Office receipting software to allow miners to pay their first year's mining rental when they record their new claims - makes one-stop operation for the customer. Additional programming will be required for the Mining staff as they adjudicate new mining claims.

In FY03 and FY04, the Department expects to extend new system capabilities to other programs it administers. These include:

- Land Leases
- Oil and Gas Leasing
- Material Sales
- Rights-of-way
- Mariculture
- Mining Permits (placer mining, exploration, reclamation) and Leases
- Large Mine Permits
- Easements assertions and vacations
- Agriculture Disposals
- Cabin Rentals
- Other programs

The order of the extensions will be determined after a review of the new water system and land use permits completed with FY02 project funding. In addition, the Department expects to deliver automatic updates and notes to the status plat system. The DNR status plat system is undergoing a major update under the federally funded Alaska Minerals Information At-Risk capital project. This CIP will build on that federal funding by delivering automated updates and notices to the platting system, saving adjudicators much time, and reducing the overall cycle time for plat updates. This will occur at the end of FY02 or in FY03.

Project History:
Funding received in FY02 is being used to demonstrate new systems for some of the programs that DNR provides. Once these are done, the department can assess what has been learned, and using FY03 and FY04 funding, can extend these improvements to all DNR programs. Specifically, in FY02, the department expects to:

- build a new system for the DNR water management program (water rights and temporary water use permits);
- build a new system for the Land Use Permit System within the Division of Mining, Land and Water
- use off-the-shelf software to deliver flexible management reports to managers and staff;
- build a web-based system that will allow individuals to apply for land sales on-line;
- provide one-stop payment for new mining claims.

Together, these systems will demonstrate solutions to the problems identified above, for an important, but small subset of the programs managed by DNR. By the end of FY02, the department will be able to assess the successes, modify plans where necessary, and in FY03 and FY04, extend the improvements to other DNR programs.

Annual Operating and Maintenance Costs:
Mainframe Changes: There are no expected increases to annual operating and maintenance costs. Operational savings are expected to offset any incremental maintenance costs. The DNR mainframe systems currently cost the department about $170.0 per year in chargeback costs. These costs are not expected to significantly change. Programming labor cost is not expected to change because savings from reducing maintenance on today's system will be offset by maintenance costs of new features.

Oracle Costs: DNR will seek to minimize new infrastructure costs associated with expanding use of the Oracle database software by sharing the system and the costs with other users. Other users may include DNR divisions designing Oracle applications, and may include various departments who want to utilize Oracle in an enterprise environment. DOA Information Technology Group would support the enterprise environment and distribute costs on a prorated basis to the user community. Enterprise Oracle applications may include use for a geographic information system.

Line Item Spending Plan:

Project Team	**FY03**
(71000) 1 Lead Analyst	$ 80.0
(71000) 2 Analyst Programmers	$150.0
(71000) 1 Data Analyst	$ 30.0
(73000) Contractor	$100.0
(74000) Support-Supplies:	
Training	$10.0

Software Support	$20.0
Total	$390.00

Project Opposition: None known.